

Application No. 09/730,221
Response to OA of 01/04/2006

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (Currently Amended) A method for synchronizing a portion of cells of a configured set of cells to form a partition, comprising the steps of:
 - (a) reaching a first rendezvous state;
 - (b) delaying formation of the partition to allow other cells associated with said partition to reach said first initial rendezvous state; and
 - (c) transitioning cells that reached the first rendezvous state to a second rendezvous state;
wherein cells of said portion determine which cells reached the second rendezvous state in order to exclude and include cells in the formation of the partition, and cells of said portion independently execute steps (a) through (c) in parallel.
2. (Currently Amended) The method of claim 1 wherein step (b) delays until the earlier of: (i) a predetermined time; (ii) another cell of the portion of cells reaches the second rendezvous state; and (iii) all cells of said configured set of cells reach the first rendezvous state.
3. (Currently Amended) The method of claim 1 further comprising the steps of:
 - (d) constructing, for each cell of the portion of cells, a local rendezvous set comprising detected cells associated with said partition that have reached the second rendezvous state; and
 - (e) writing said local rendezvous set to a visible location;
wherein cells associated with said partition that have reached said second rendezvous state independently execute steps (d) through (e) in parallel.
4. (Original) The method of claim 2 further comprising the step of:
constructing a global rendezvous set from constructed local rendezvous sets,
wherein the global rendezvous set represents a logical intersection of said constructed local rendezvous sets.

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5. (Original) The method of claim 4 further comprising the step of: determining a core cell from said global rendezvous set.
6. (Original) The method of claim 5 further comprising the step of: determining compatible cells of said global rendezvous set as an alive set, wherein said step of determining compatible cells is performed by said core cell.
7. (Original) The method of claim 6 further comprising the step of: programming partition gating controllers to limit adverse transactions associated with a partition to said alive set.
8. (Original) The method of claim 7 further comprising the step of: establishing an operating system on said partition.
9. (Original) The method of claim 1 wherein complex information is utilized to identify other cells of the configured set.
10. (Original) The method of claim 9 wherein said complex information is obtained from a service processor.
11. (Original) The method of claim 9 wherein said complex information is retrieved from a cache.
12. (Currently Amended) A cell for use in a multi partition computer system, wherein said cell comprises partition instructions utilized to join a partition, comprising:
a processor to execute said partition instructions utilized to join said partition;
firmware device to store said partition instructions utilized to join said partition;
code to set a register reflecting a first rendezvous state;
code to delay partition formation operations after setting said register to reflect said first rendezvous state; and
code to transition to a second rendezvous state after delaying partition formation operations; and

code to determine whether other cells also transitioned to the second rendezvous state to exclude and include cells in order to form the partition.

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13. (Original) The cell of claim 12 wherein said partition instructions are executed in parallel in association with partition instructions executed by other cells of a configured set.

14. (Original) The cell of claim 13 further comprising:
code for constructing a local rendezvous set comprising detected cells of the configured set that have reached the second rendezvous state; and
code for writing said local rendezvous set to a visible location.

15. (Original) The cell of claim 14 further comprising:
code for retrieving local rendezvous sets generated by other cells of said configured set; and
code for constructing a global rendezvous set from constructed local rendezvous sets; wherein the global rendezvous set represents a logical intersection of constructed local rendezvous sets.

16. (Original) The cell of claim 15 further comprising:
code for determining a core cell from said global rendezvous set; and
code for determining compatible cells of said global rendezvous set as an alive set, wherein said code for determining compatible cells is executed when the cell is determined to be the core cell.

17. (Original) The cell of claim 16 further comprising:
code for programming at least one partition gating controller to limit adverse transactions associated with a partition to said alive set.

18. (Original) The cell of claim 13 wherein complex information is utilized to identify other cells of the configured set.

19. (Original) The cell of claim 18 wherein said complex information is retrieved from a cache.

20. (Original) The cell of claim 12 wherein said code for delaying partition formation operations delays until the earliest of: (i) a predetermined time; (ii) another cell

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of the configured set of cell reaches the second rendezvous state; and (iii) all cells of said configured set of cells reach the initial rendezvous state.

21. (Previously Presented) A method of forming partitions of a computer system according to configuration data identifying cells to form said partitions, wherein each cell comprises a set of respective computing resources, comprising:

setting a respective register, by each cell, to indicate completion of a subset of boot operations;

transitioning to a partition formation state, by each cell, at the earliest of (i) an expiration of a timer, (ii) all cells, within the same partition as indicated in said configuration data, setting their respective registers, and (iii) another cell within the same partition indicating transition to said partition formation state;

attempting to determine, by each cell, which other cells belonging to the same partition, have transitioned to said partition formation state to generate a respective local partition set;

writing, by each cell, said local partition sets to a globally accessible location; delaying, by each cell, an amount of time after performing said writing; and forming partitions using common information in said local partition sets.

22. (Previously Presented) The method of claim 21 further comprising: resetting cells that are identified as belonging to a partition in said configuration data and that are not identified in common information in said local partition sets.

23. (Previously Presented) The method of claim 21 wherein a copy of said configuration data is stored on each cell.

24. (Previously Presented) The method of claim 23 further comprising: operating a service processor to update copies of said configuration data on said cells before said transitioning is performed.

25. (Previously Presented) The method of claim 23 further comprising:

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analyzing, by each cell, its respective copy of said configuration data to identify data corruption within said copy of configuration data.

26. (Previously Presented) The method of claim 21 wherein said forming partitions comprises:

programming logic coupled to said cells to limit input/output (IO) transactions between said cells.

27. (Previously Presented) The method of claim 21 wherein said forming partitions comprises:

initializing a respective operating system on each partition.